“Choosing a Good Mentor”
and
“What Makes for a Successful Graduate Career?”
Seek out and extract mentoring.

Do not expect graduate training to come to you.

Professors don’t have training in mentoring. They might not even like it. Don’t expect them all to be good at it.
Question posted to assorted Professors at assorted institutions:

“What is one thing you wish someone had told you when you were starting grad school?”
“You're not an undergraduate anymore.”
“1) find the biggest problem you can and attack it from a different perspective

2) it's ok if you are wrong; it's not ok if the fear that you might be wrong stymies your imagination”
“Advisors are not bosses, they are kings and queens. ... I am much easier to get time and help from if I am treated like a benevolent benefactor than like a boss that owes you something for your efforts.”
You can read them all here. Nearly every response was different from every other response.
Every successful graduate student has to solve the same set of challenges, but the most challenging facet is different for everybody.
“Successful graduate programs are all alike; every unhappy program is unhappy in its own way.”

After Tolstoy’s Anna Karenina
All successful graduate students spend lots of time thinking.

See:

Figure 3. Charles Darwin engaged in the arcane and almost lost art that today we would label thinking. Illustration by Richard Loehle.
All successful graduate students are productive and effective writers.
All successful graduate students have good relations with their major advisor.
Characteristics of the mentor-trainee relationship (from Macrina 2000)

Mentors:

- Demonstrate & teach style and methods in research
- Evaluate and critique research
- Foster socialization of trainees
- Promote career development
- Should perform different roles at different times
Characteristics of the advisor-student relationship (from Macrina 2000)

- Graduate students depend on their advisor

The relationship:
- ... is exclusive
- ... requires mutual trust and respect
- ... requires effective communication
- ... requires adaptation & compromise
- ... tends to last through a career
- ... is dynamic and should evolve
Selection of a mentor (after Macrina 2000)

Attributes to consider:

- Publication record; significance of contributions.
- Financial support
- National and international recognition
- Rank, tenure, proximity to retirement/ administration
- Prior training record
- Current positions of recent graduates
- Prominence of student contributions to research program
- Organization of lab and management style
All successful students extract mentorship.

• Prospect broadly for mentoring.
• Extract it where you find it.
• Identify what you want to learn from potential mentors.
• Identify what mentors want to teach.
• Structure interactions so you learn the most.
  – Plan conversations.
  – Try different strategies for engaging mentors.
  – After interactions, take notes and reflect.
  – Extract intuition and evaluate it.
  – Initiate follow-up discussions.
  – Disagree when appropriate; cultivate fun collegial debates.
• Invite criticism
... separate merit of ideas from self-worth.

• Make intellectual debates fun and productive – never personal.
  – Listen and think
  – Recognize when you are wrong, but don’t abdicate too quickly
  – Be respectful when you think you are correct
  – Use debates to polish your skills in logic, communication, and collegiality
…identify personality differences with mentors and colleagues, and learn to work around them.
... quickly resolve professional conflicts.
...quickly resolve professional conflicts.
... take ownership of their program

- Research
- Development of skill sets
- Committee members and committee meetings
- Time management
- Attending professional meetings
- R & R
- Courses
- Teaching
- Timing and logistics of program requirements
… enjoy their work.
Mainly, graduate programs thrive or not depending on the student

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